GEOGRAPHIC NEWS BULLETINS

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NOTE TO TEACHERS: The next issue of the Geographic News Bulletins will be published upon the reopening of schools in October. The Bulletins are not issued during the summer vacation months. It will facilitate the handling and prompt mailing of the Bulletins in the fall if teachers whose subscriptions expire with this issue will apply now for the Bulletins they need for next year. See application form following Bulletin No. 5.

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TABLE MANNERS IN THE ARCTIC
(See Bulletin No. 3)

HOW TEACHERS MAY OBTAIN THE BULLETINS

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Why the Mississippi Goes on a Rampage

WHY DOES each succeeding great flood in the Mississippi River break all records?

Why does the menace to life and property on this stream grow greater each year?

Perhaps the most important factor is the usually praiseworthy effort of Americans to develop and build up their country.

Aside from the fact that several decades ago there were fewer people living and fewer dollars invested in the regions subject to overflow in the lower Mississippi Valley, the flood stages were actually lower in those days. They were lower, to consider one important fact, for the very good reason that less water was then fed into the Mississippi's 100,000 tributaries in a given space of time. Forests and woodlands that do not now exist held a large part of the rainfall and fed it slowly into brooks and creeks and rivers. Irregularities in the lie of the land formed puddles that later evaporated, or sent rills in tortuous paths that slowed up the run-off.

When the Mississippi Was 40 Miles Wide

In late years a constantly increasing population has been busy changing these conditions. Every tree cut, every roof built, every street paved, every drainage ditch dug, and every culvert constructed in the vast area drained by the Mississippi River system has done its bit toward pouring rainfall more quickly into the great river.

Not only has man helped to put more water into the Mississippi; his works have helped to confine it there. When De Soto and his followers first knew the Mississippi it spread out at each flood season over a wide area. Sometimes in its lower reaches it was 20, 30 and even 40 miles wide.

The fact that the flood waters spilled away at numerous places into swamps and lowlands kept the flood crest down in the lower river. In 1717 three-foot levees protected New Orleans. Now they rise 25 feet or more above the city. Even as late as 1882 the highest flood stage at New Orleans was 16 feet. In 1922 it was above 22 feet; and the present rise threatened to exceed that figure. One reason, at least, for this is that more efficient levee maintenance for many hundreds of miles along the river has herded the flood waters past New Orelans as well as other lower river points in the regular channel.

Levees Protect Huge Area of Farm Land in Delta

More intensive development of the lowlands has made this levee system necessary. Now some 29,000 square miles are dependent on the levees for protection. Breaks still occur, and when they do they drain off some of the flood waters and so relieve in some measure the strain on the banks farther down stream. But it is not the harmless affair that it was in the days of De Soto. Now towns and plantations, railways and industrial plants lie in the lowlands, and any "relief" that a levee break may occasion to down-river points is at a cost of many lives and much valuable property.

On the whole a considerable quantity of water finds its way from the lower Mississippi through levee breaks and bayous. The most important natural

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PARLIAMENT HOUSE AT MELBOURNE, WHICH AUSTRALIAN LEGISLATORS LEAVE FOR NEW BUILDING AT CANBERRA

At Melbourne the legislators lived in one of Australia's largest cities. It rivals Sidney in population. But the legislators and many government clerks and officials have left Melbourne to take up their duties in the new capital, Canberra, which lies 300 miles northeast (see Bulletin No. 2).

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Canberra: New Capital of Australia

CANBERRA, the new Federal city of Australia, was formally dedicated by the Duke of York last week. The Australian parliament has met in Canberra for the first time.

By moving into a capital city built where no town existed before, the Australian Government took a step closely parallel to that of the United States in the summer of 1800, when the seat of government was moved from one of its greatest cities, Philadelphia, into a virtual wilderness.

Canberra Provides More Conveniences Than Did the Infant Capital Washington

A century and a quarter has seen a great advance in the art of capital city building. Although the residents of Canberra will find their capital, as early Washingtonians found theirs, a city made up in large part of "magnificent distances," at least they will have the organized comforts of modern community life such as the infant Washington could not know.

One of the first things done at Canberra was to start work on a water supply system. The first unit of this has long been completed. Next, both sanitary and storm sewers were constructed; and only a little later a powerhouse was built, and a railway was extended to an existing line. There are some good streets in Canberra instead of the rude trails and muddy paths by which the American congressmen of a hundred and twenty-seven years ago found their way through thickets and across morasses between the Capitol and the White House.

The Federal Territory in which the new Australian capital is situated was set apart for the purpose in December, 1909. It is near the southeastern corner of the continent close to its center of population. The Territory contains 912 square miles and so is thirteen times the size of the present District of Columbia. It is of an irregular, elongated shape, so formed as to include the drainage basins of certain streams. One of these, the Cotter River, is the source of water supply for the future city. The average width of the Territory is approximately 20 miles, and its extreme length about 60 miles.

American Won Contest for Canberra City Plan

Australia's new capital is to be an inland and upland city. It lies some 70 miles from the ocean, behind the dividing range of mountains that skirts the coast. It is nearly 200 miles southwest of Sydney and about 300 miles northeast of Melbourne. The site chosen for the city was formerly a sheep "station" or ranch, an undulating upland plain with an altitude of about 1,800 feet. Scattered about are isolated hills rising 800 feet or more, while across the plain flows a small river, the Molonglo. It is in a latitude corresponding roughly to that of Chattanooga, Tennessee, or Asheville, North Carolina.

A world-wide contest was launched by Australia in 1911 for the submission of plans for her made-to-order capital. The first prize was won by an American, the second by a Finn, and the third by a Frenchman.

A commanding eminence south of the river was chosen as the site for the permanent Capitol, and about this blocks are arranged in a great circle. Lesser circles of blocks touch this Capitol Circuit, or exist at a distance, connected

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safety valve is the Atchafalaya River or bayou which flows away from the Mississippi at the mouth of the Red River and finds its way directly to the Gulf of Mexico some 50 miles west of New Orleans. In flood times this out-flowing stream takes from the swollen "Father of Waters" as much as 350,000 cubic feet of water each second—an amount equal to more than half the average flow of the Mississippi. It is because of such losses as this, coupled with the much greater depth of the channel in the lower river, that the flood stage can be between 50 and 60 feet at Memphis and Vicksburg and only a little more than 20 feet at New Orleans.

The Mississippi River system is truly a continental feature, draining a million and a quarter of the three million odd square miles of the United States. Thirty of the forty-eight States send a greater or less contribution of water to this great stream. Even New York, Pennsylvania, Virginia, North Carolina and Georgia, with frontages on the Atlantic, are tapped by its tributaries. Of the inland States only five—Idaho, Utah, Nevada, Arizona, and Vermont—do not pay drainage tribute to the "Father of Waters."

River Cities Located on Left Bank Bluffs

The main Mississippi River is more than 2,500 miles long, while the Mississippi-Missouri is 4,200 miles in length—the longest river system in the world. The great scale on which the Mississippi is built becomes evident when one considers the time required for floods to pass down its course. About thirty days are required for the surging flood crest to pass from the mouth of the Ohio to New Orleans, and from ten days to two weeks from Greenville, Mississippi, to New Orleans.

Most travelers, in traversing the lower Mississippi River, are astounded at the deserted aspect of long stretches of the banks. It is almost as though one were on a stream running through an uninhabited land. In the case of such a river, flowing through extensive lowlands, this must be true, except in nations with a teeming population.

The Mississippi is so treacherous, its definite course is so tentative, that in the lower regions next to the river little development has yet been possible. Tangled forests, willow-covered deserted islands, and stretches of sand follow in weary succession as the river makes its way in great bends and loops. The deserted aspect is particularly marked on the right bank, which is lowest. On the left bank rocky bluffs appear at intervals, and, almost without exception, have been selected for permanent settlements. Columbus, Kentucky; Randolph and Memphis, Tennessee; Vicksburg, Grand Gulf, and Natchez, Mississippi; and Baton Rouge, Louisiana, all lie on these infrequent left-bank bluffs which geologists say represent the remains of coastal promontories about an ancient sea.

Louisiana Grows 70 Feet Per Year with River Silt

An important aspect of the Mississippi River is the great amount of silt which it carries. For many thousands of years the river has been transporting its burden of mud and clay and sand, depositing it to build up new land. South of Cape Girardeau, Missouri, the country through which the river flows for more than 600 miles to the Gulf is of its own creation. The youngest of this land, of course, is the present delta south of the Red River, a region of low land, lakes, bayous, and marshes. It is estimated that each year the river dumps into the Gulf solid matter sufficient to build new land one mile square and 241 feet deep. The delta probably advances seaward 60 or 70 feet per year, or 1¼ miles per century. The "land" added each year lacks much of being terra firma. Instead it is a quaking morass of jelly-like silt.

The noticeable extension of Louisiana into the Gulf cannot go on indefinitely. About 11 miles out from the present edge there is a sudden drop to deep water in which the ocean currents are strong. When the "Father of Waters" has built to this line the burden of silt will probably be whisked away to be scattered ineffectually over broad areas of the ocean floor.

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Baffin Island: Where an American Expedition Hopes to Penetrate Unexplored Regions of the Far North

BAFFIN ISLAND is the objective of an American expedition this year. The explorers hope to penetrate parts of the large Arctic island now unknown.

"Mountaynes, in most parts covered with snow," so Frobisher describes the southern extremity. Modern discovery confirms this and his further belief that "the northern lands have lesse store of snow, more grasse, and are more playne countreys." His description of the birds and beasts and of the Eskimos, their character, implements and boats, fits precisely with our present estimate.

Yet Frobisher touched only one corner of this vast island and his successors scarcely more than the shore, so a vast virgin field awaits exploration.

Third Largest Island in the World

Baffin Island is the fourth largest island in the world, Greenland, New Guinea and Borneo surpassing it. Resolution Island, off the southern point of Baffin Island, is about on the latitude of the southern shore line of Alaska and of Oslo, capital of Norway, and Leningrad. But Baffin Island is more than 1,000 miles in length, so its northern latitude is 500 miles north of both Hammerfest, at the top of Scandinavia, and Point Barrow, Alaska. Baffin Island has resisted thorough exploration by virtue of its vastness. It is larger than any State of the United States except Texas and would make almost four New Englands.

A lake nearly as large as Ontario is one of the island's features. Angmakjuak, "the great water," in Eskimo language, is 120 miles long and 40 miles wide. It is, however, only one of the "Great Lakes" of Baffin Island. There are also Tesseyoakjuak Lake and Lake Netselik. The latter may be larger than Angmakjuak.

South Sea islands are supposed to afford a life of magnificent ease in contrast with the Arctic, since a South Sea family can live on the fruit of three trees. Baffin Island Eskimos, however, have improved on this tropic free grocery. In the winter they build their igloos on the lakes, cut a hole through the parlor floor, and fish for their dinner. The Eskimo population is placed at 670.

Rivers and lakes of the island are well stocked with fish, notably sea trout and speckled trout. The Arctic hare, wolves, and white and blue foxes are found. The foxes apparently live on mice of various kinds. Reindeer are numerous, and a few musk oxen are believed to inhabit the northern section.

May Hold Mysterious Home of the Blue Goose

Some Arctic authorities believe that Baffin Island may contain the mysterious home of the blue goose. It is known that the trumpeter swan and the common eider breed on Nottingham Island, at the mouth of Hudson Bay, but the breeding ground of the blue geese, whose flying wedges, hooting across the spring sky, are so familiar to us, has never been discovered.

Like the Americas, Baffin Island takes its name, not from its discoverer, but from a later explorer, William Baffin. Baffin never led an expedition to its shores, but his scientific observations made as pilot on three important voyages into the "Northwest" earned him the honor of having the great island, as

by radial avenues. North of the river, on a similar hill, a university will be built. By means of a dam, the Molonglo River will be expanded into artificial lakes, on the banks of which will be public parks and gardens.

Guard Against Errors Made at Washington

Australians have profited by the errors of other capital builders and have provided against the Topsy-like propensity of cities to "just grow," as did Washington during a certain era of its existence. No lots or areas in the district will be sold outright. Instead 99-year leases will be given, with reappraisal of values every ten years. The lessees will pay rent amounting to 5 per cent on the appraised values. By withholding leases in certain sections of the city and granting them in others, the Commission of three men in charge of Canberra can control its growth. The Commission also requires that no structure be erected until the plans for it have received official approval. At present there is a two-story height limit, and Canberra will be residentially largely a city of bungalows. As a result of this method of control, Canberra will be the only state-owned, state-molded city in the civilized world.

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REFUGEES ON A MOUND AT MODOC, ARKANSAS

Levees are islands of safety when floods rage in the lower Mississippi Valley. Just as dikes have reclaimed land from the sea in Holland, so levees have been built in this country to protect 29,000 square miles of land from flood. But levees give no certain guarantee of safety against the rush of "The Father of Waters" (see Bulletin No. 1).

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Old Ironsides: "The Ship That Was a Navy"

THE U. S. S. *Constitution*, better known as *Old Ironsides*, the most famous frigate of the United States Navy, that won so many gallant victories in the war with Barbary Corsairs, saved the nation in the War of 1812, and preserved our independence, is now in dry dock at the Boston Navy Yard preparatory to undergoing restoration. The actual work of reconstruction will start about May 31.

To accomplish the restoration of this glorious old frigate $745,000 is needed. The National Committee of the Save "Old Ironsides" Fund wishes to raise more than this sum, in order to establish also a trust fund to keep the vessel in repair forever.

Rear Admiral Philip Andrews, U. S. Navy, chairman of the National Committee of the "Save 'Old Ironsides' Fund," writes, in explanation of the project:

"The restoration of the Frigate *Constitution* to her original condition was authorized by Act of Congress, March 3, 1925, which also authorized the Secretary of the Navy to receive donations from the people of the country for this purpose.

"Congress would have appropriated the funds necessary for this work if it had been requested to do so, but the Secretary of the Navy believed it would be a beautiful exhibit of patriotism if the people themselves and particularly the children of the country gave small amounts to make up the fund needed. Since that time educational campaigns have been carried on in many of the schools of the country where patriotic exercises about the history of 'Old Ironsides' and the early history of our country have been held. The thought back of this movement has been to encourage the children to study the history of this time and to foster a more intensive patriotism and love of country. Lessons so learned remain with children forever.

"The campaign has, and is, creating a wholesome interest in good government and in the principles upon which our country is founded. So the whole movement among the children is considered by the committee as a deposit in the bank of patriotism which should and will yield big dividends in the future. That is why Congress has not been asked to appropriate the money to rebuild the *Constitution*.

"Up to the present time more than $322,000 has been raised. The success of the campaign depends upon the distribution of handsome reproductions of Gordon Grant's splendid oil painting of the 'Constitution.' These reproductions, which measure 18¾ by 22¾ inches, are in ten colors, printed by a special process. The National Committee is not now asking for donations of contributions to the fund, but is selling for twenty-five cents a picture that would cost many times that amount in any art store.

"Already more than 534,000 of these pictures have been sold, although this phase of the campaign has continued for only a short period. The committee hopes to sell three million pictures, and this must be done to make the campaign a success and save from destruction this gallant vessel, to which we owe the maintenance of our freedom. These pictures may be obtained by addressing 'Old Ironsides' Fund, Navy Yard, Boston, Massachusetts, and sending 25 cents for each picture ordered."

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well as the big bay between North Greenland and Baffin Island, named for him. His most remarkable voyage was with Robert Bylot, shipmaster, through Davis Strait, now the highroad to North Greenland, and into Baffin Bay, which had never before been seen by white men.

An Island of Many "Lands"

At the north end of the bay, Baffin noted down the great declination of the compass, the greatest discovered up to that time. Three merchant adventurers of London, who sent this expedition and many others to plant the British flag in new soil, are memorialized in guide-posts to the Arctic named by this expedition: Lancaster Sound, for Sir James Lancaster, bounding Baffin Island on the northwest; Jones Sound, farther north, for Sir Francis Jones; and Smith Sound, on which Etah lies, for Sir Thomas Smith.

Baffin Island is virtually a land of many lands. Within its shores are Penny Land, Cumberland, Hoppner Land, Greenwood Land, Cockburn Land, Fox Land, Prince William Land, Milne Land and Meta Incognita. So sprawled out is the island with points and promontories that a succession of explorers discovered various parts independently. Each christened his find a "land" hoping that it was a separate island. Later exploration has tied all these diverse "lands" into one island, Baffin Island.

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ROLLING A WALRUS ONTO A ROCK BEACH AT LOW TIDE

The walrus is a major source of food for Eskimos on Baffin Bay and Smith Sound. This mammal is the largest found in the Arctic. In winter the Eskimos are skillful in hauling their walrus trophies onto the ice, but in summer they capture specimens too heavy to drag ashore. They bring their catch as near land as possible, and then wait for the receding waters to provide them with a dry dock.

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How Swatting the Mosquito Brings Prosperity in Macedonia

SALONIKI has come up in the trade world with a speed which astonishes the old established cities of the Mediterranean. In five years it has grown from 140,000 to 260,000 population.

Saloniki has prospered because of the first sound peace which the city has known in many decades. Greece has done her part by declaring Saloniki a free port. Five railroad lines tapping the valleys of all the Balkan States have poured produce into the city's warehouses. Finally, the draining of the Vardar River marshes near the port gives promise of a rich farm land near-by and the assurance that Saloniki will be freed from the menace of mosquitoes.

Backed by an American loan of $2,500,000, American engineers expect to win a victory over the greatest enemy to progress in Macedonia, the mosquito.

Farms for Refugees from the Smyrna Tragedy

Everyone is familiar with the heroic part the United States Navy played in helping to move 300,000 Greek refugees in two weeks out of the inferno at Smyrna to safety at Saloniki and Athens. Reclamation of the Vardar marshes is solid, constructive work by which Americans are finishing the Smyrna task.

Out of the reclaimed flood plain of the Vardar will be carved farms for thousands of Greeks deported from Constantinople and Asia Minor. There are still many of that vast refugee army who must have land. Twelve acres, experts say, is the minimum for a family to live on, but many refugee huts are set down in patches of two and three acres.

American engineers have established their headquarters at Saloniki, which lies to the east of the mouths of the Vardar. They are thus at the entrance to the main corridor from the Mediterranean Sea which leads directly into the heart of the Balkans. The Vardar, although only 200 miles long, is an important stream of southeast Europe. It has carved a channel for itself and a roadway for men through a jumble of mountains and valleys.

Fifteen Tons of Quinine for Refugees

Reclamation plans call for the draining of two lakes, Arjan and Amatovo. They lie end to end beside the Vardar and measure together about 15 miles. Lakes Arjan and Amatovo are shallow pools with broad mosquito marshes. On a map they form a handle to the Vardar delta which unfolds fan-wise in a green swamp 20 miles from tip to tip. Saloniki is at the eastern tip.

The delta, in fact, goes by the name of the Saloniki Campagna. That name recalls the more famous Campagna of Italy north of Rome, once the granary of the Imperial City, to-day also a malarial waste. Fifteen tons of quinine were prescribed for the refugee camp that lived in the tent city at Saloniki. So if the American engineers can do for the Saloniki Campagna what Goethals and Gorgas did for Panama, southern Macedonia may again earn its reputation, "the storehouse of the Balkans."

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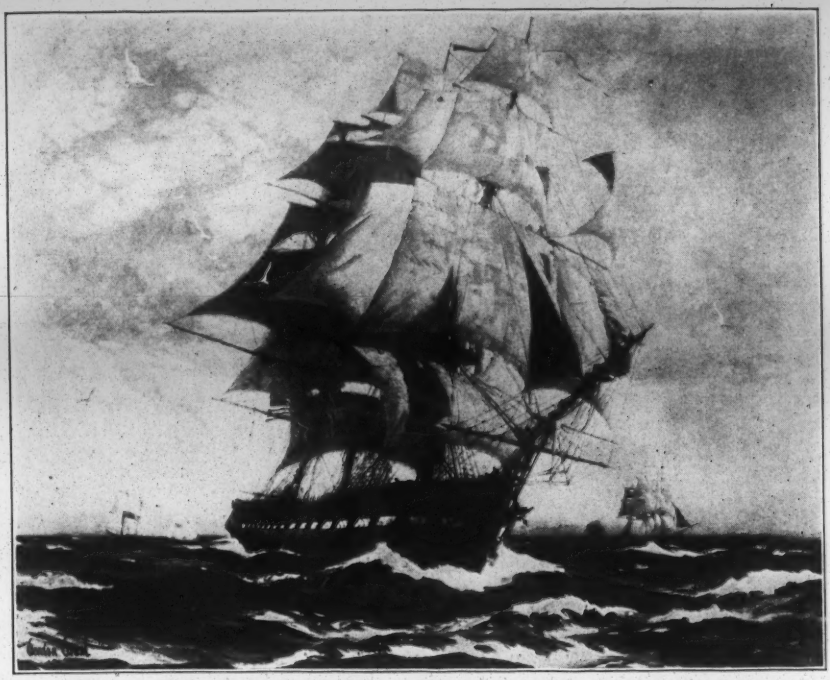

THE U. S. FRIGATE "CONSTITUTION," POPULARLY KNOWN AS "OLD IRONSIDES"

This famous ship bears the scars of 42 battles. Her first flags and signals were made by Betsy Ross, in Philadelphia. The bolts that fastened her timbers were made by Paul Revere. She has never known defeat, but the ravages of decay threatened her destruction, which hostile shot could not accomplish, until Congress entrusted her restoration to the school children of America.

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A REFUGEE HOME IN MACEDONIA

The Greek Government has built homes like this for thousands of refugees who fled from Turkey. With such a home goes a plot of land, if the government can find acreage. Reclamation of the Vardar River marshes will open a big agricultural region for refugee homesteads (see Bulletin No. 5).

Form for Renewal of Bulletin Requests

Many subscriptions for the GEOGRAPHIC NEWS BULLETINS end with this issue. Teachers may renew their requests now and thereby be assured of receiving the first issues at the beginning of the school year next fall. If you desire the Bulletins continued, kindly notify the Society promptly. The attached form may be used:

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